

### **Patent claims**

1. A sliding element which at least in a sliding section (4) comprises a surface structure (6) of carbon.
2. A sliding element according to claim 1 which is designed as a gearshift fork, in particular for a motor vehicle gear, wherein the gearshift fork comprises a carrier element (2) which at least in an engagement section (4) is provided with a surface structure (6) of carbon.
3. A sliding element according to claim 1 or 2, with which the surface structure is formed as a surface layer (6) of carbon.
4. A sliding element according to claim 3, with which the surface layer (6) is adhered to the carrier element (2).
5. A sliding element according to claim 3 or 4, with which a connecting layer, preferably of an aramide fabric, is arranged between the carrier element (2) and the surface layer (6).
6. A sliding element according to one of the preceding claims, with which the surface structure (6) contains carbon fibres and/or carbon particles, which are preferably embedded into a resin material, in particular phenolic resin.
7. A sliding element according to one of the claims 2 to 6, with which the at least one engagement section is designed as an insert (10) which is connected, preferably detachably, to the carrier element (2).

8. A sliding element according to claim 7, with which the insert (10) is completely formed of a carbon structure.
9. The use of a carbon structure as a sliding coating.
10. The use according to claim 9, with which the carbon structure contains carbon particles and/or carbon fibres.
11. The use according to claim 9 or 10, with which the carbon structure is compacted.